



1621 P
161

MS PETITION
PATENT
0020-4863

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Tatsuo NAKADA et al. Conf.: 5716
Appl. No.: 09/831,598 Group: 1621
Filed: June 6, 2001 Examiner: E. PRICE

JUN 21 2004

TECH CENTER 1600/2900

For: AZEOTROPIC COMPOSITION OF 1,1,1,3,3-
PENTAFLUOROPROPANE AND 1,1,1-TRIFLUORO-
3-CHLORO-2-PROPENE, PROCESS OF
SEPARATION AND PURIFICATION USING THE
SAME, AND PROCESS FOR PRODUCTION OF
1,1,1,3,3-PENTAFLUOROPROPANE AND PROCESS
FOR PRODUCTION OF 1,1,1-TRIFLUORO-3-
CHLORO-2-PROPENE

#18

PETITION TO WITHDRAW ABANDONMENT
SINCE REPLY WAS TIMELY FILED

MS PETITION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

June 15, 2004

Sir:

In response to the Notice of Abandonment mailed June 3, 2004, which issued in connection with the above-identified application, this is a Petition to withdraw the "abandonment status" of the present application, since a Reply was timely filed on February 4, 2004. As evidence of the fact that a Reply was timely filed, enclosed herewith are the following:

- a copy of the Reply filed February 4, 2004 (with a Large Entity Transmittal Form); and
- a copy of the postcard receipt which was date-stamped on February 4, 2004.

It is requested that the abandonment status of the present application be immediately removed so that prosecution may resume with full consideration and entry into the record of the timely filed Reply.


If the U.S. Patent Examiner has any questions regarding the above matters, please contact Applicants' representative, Eugene T. Perez, at the phone number listed below.

It is submitted that no fees are required for filing this Petition, since the error occurred because of a mistake on the part of the U.S. Patent and Trademark Office.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

Andrew D. Meikle, #32,868

¹⁸
ADM/ETP:trb
0020-4863

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

Attachments: Copy of Reply (w/Lg. Entity Transmittal Form)
Copy of postcard receipt

(Rev. 02/08/2004)

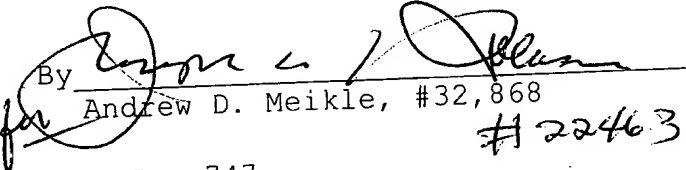
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- ☐ Petition for () month(s) extension of time pursuant to 37 C.F.R. §§ 1.17 and 1.136(a). \$0.00 for the extension of time.
- ☒ No fee is required.
- ☐ Check(s) in the amount of \$0.00 is(are) enclosed.
- ☐ Please charge Deposit Account No. 02-2448 in the amount of \$0.00. This form is submitted in triplicate.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

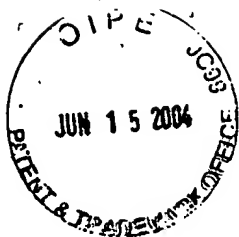
By 
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ADM/ETP/las
0020-4863P

Attachment(s)

(Rev. 09/30/03)



PATENT
0020-4863P

IN THE U.S. PATENT AND TRADEMARK OFFICE

JUN 21 2004

Applicant: Tatsuo NAKADA et al. Conf.: 5716
Appl. No.: 09/831,598 Group: 1621
Filed: June 6, 2001 Examiner: E. Price

TECH CENTER 1621/2003

For: AZEOTROPIC COMPOSITION OF 1,1,1,3,3-
PENTAFLUOROPROPANE AND 1,1,1-TRIFLUORO-3-CHLORO-2-
PROPENE, PROCESS OF SEPARATION AND PURIFICATION
USING THE SAME, AND PROCESS FOR PRODUCTION OF
1,1,1,3,3-PENTAFLUOROPROPANE AND PROCESS FOR
PRODUCTION OF 1,1,1-TRIFLUORO-3-CHLORO-2-PROPENE

REPLY UNDER 37 C.F.R. § 1.111

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

February 4, 2004

Sir:

In reply to the Office Action dated November 4, 2004, the following amendments and remarks are respectfully submitted in connection with the above-identified application.

Remarks begin on page 2 of this paper.

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February 4, 2004

Reply to Office Action of November 4, 2003

REMARKS

Claims 1-13 are pending in this application. Claims 3-13 have been withdrawn from consideration.

Because the product claims are being considered herein (claims 1-2), Applicants respectfully request rejoinder and allowance of the withdrawn claims in Group II (claims 3-13) if the product claims are found allowable. *In re Ochiai*, 37 USPQ2d 1127 (CAFC 1995).

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Priority

The Examiner has acknowledged priority based on Japanese Application No. 1998/323496, filed November 13, 1998, but has indicated that a certified copy thereof has not been received. Applicants submit that such a copy should have been forwarded by the International Bureau to the USPTO. Still, Applicants enclosed herewith a certified copy of Japanese Application No. 1998/323496.

Issues Under 35 U.S.C. § 102(a)

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Yasua Hibino et al. (EP 0 864 554 A1; hereinafter "EP '554"), as stated at page 3 of the Office Action (the Office Action

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incorrectly cites EP 0 864 551 A1). Applicants respectfully traverse since the cited reference fails to disclose all features as instantly claimed.

The Present Invention

The present invention is directed to an azeotropic composition consisting of 1,1,1,3,3-pentafluoropropane ("R-245fa") and 1,1,1-trifluoro-3-chloro-2-propene ("R-1233zd") (see claim 1). In another embodiment of the present invention (claim 2), the molar ratio of 1,1,1,3,3-pentafluoropropane to the 1,1,1-trifluoro-3-chloro-2-propene of the azeotropic composition is in the range of 64/36 to 62/38.

Distinctions over EP '554

The Examiner refers Applicants to Examples 1-10 and Tables 1-11 of EP '554. However, Applicants respectfully submit that EP '554 fails to disclose all features as instantly claimed. For instance, EP '554 fails to disclose the claimed azeotropic composition.

A closer reading of EP '554 reveals that EP '554 fails to disclose an azeotropic composition of 1,1,1,3,3-pentafluoropropane and 1,1,1-trifluoro-3-chloro-2-propene. Instead, the cited EP '554 reference merely discloses a crude mixture of R-245fa and R-1233zd (i.e., see the Abstract). The present invention, on the other hand, is directed to a composition wherein a mixture shows azeotropy at a particular

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temperature and at a particular molar ratio (i.e., see the features of instantly pending claim 2). In other words, the present invention is directed to an azeotropic composition (of 1,1,1,3,3-pentafluoropropane and 1,1,1-trifluoro-3-chloro-2-propene; see claim 1), and not the mixture of EP '554. Thus, this rejection is overcome due to the lack of disclosure present in EP '554.

Further, Applicants respectfully submit that EP '554 fails to disclose or recognize that its compounds show any azeotropic properties. With regard to Examples 1-10 and the Tables of EP '554 (as cited in the Office Action), Applicants respectfully submit that the disclosed mixtures are not an azeotrope as instantly claimed. Two compounds in a mixture that are similar or close in the respective boiling points do not necessarily mean that they will form an azeotropic composition. Azeotropy is distinct from the process or phenomenon wherein a small amount of 1,1,1,3,3-pentafluoropropane, which has a boiling point relatively close to that of 1,1,1-trifluoro-3-chloro-2-propene, is inevitably distilled off together with the 1,1,1-trifluoro-3-chloro-2-propene. In EP '554, there is simply a crude mixture of R-245fa and R-1233zd, but there is no azeotropic composition as instantly claimed.

To further support Applicants' position regarding the disclosure of EP '554, Applicants submit the following calculations. The molecular weight of 1,1,1,3,3-pentafluoropropane is 134; the molecular weight of 1,1,1-trifluoro-3-chloro-2-propene is 130. According to the molar ratio

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of the present invention (i.e., see claim 2), the weight ratio between R-245fa and R-1233zd is in the range of 64.7/35.3 to 62.7/37.3. However, the weight ratios of the "Fresh-Feed" as shown in each of Tables 1-11 of EP '554 does not disclose the weight ratios of the present invention. Thus, Applicants submit that this rejection is overcome because EP '554 does not disclose the claimed azeotropic composition.

In addition, as shown in any one of the distillates in Tables 1-11 of EP '554, the amount of R-1233zd is so small and not right that it cannot form an azeotropic composition with R-245fa as achieved by the present invention. Therefore, Applicants respectfully submit that the EP '554 compositions are merely a mixture of components, and that EP '554 does not disclose an azeotropic composition or azeotropic properties as instantly claimed.

Thus, Applicants respectfully submit that EP '554 fails to disclose the present invention. Because "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," the cited EP '554 reference cannot be a basis for a rejection under § 102(a). See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Thus, because of the lack of disclosure of all features as instantly claimed, the rejection in view

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of EP '554 is overcome. Reconsideration and withdrawal are respectfully requested.

Conclusion

Applicants respectfully submit that the present invention is patentably distinct over the cited EP '554 reference, and that EP '554 fails to disclose an azeotropic composition of 1,1,1,3,3-pentafluoropropane and 1,1,1-trifluoro-3-chloro-2-propene as instantly claimed.

A full and complete response has been made to all issues as cited in the Office Action. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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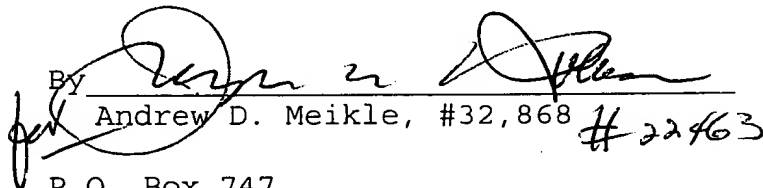
February 4, 2004

Reply to Office Action of November 4, 2003

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Andrew D. Meikle, #32,868 #22463

ADM/ETP
0020-4863P

P.O. Box 747
Falls Church, VA 22040-0747
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Enclosure:

Certified Copy of Japanese Application No. 1998/323496

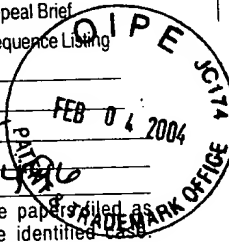
(Rev. 09/30/03)

Papers Filed herewith on: 02-04-04
DOCKET NO.: 0020-4863P ATTY: ADM/ETP
APPLICANT(S): NAKADA et al.
APPLN. NO: 09/831,598 FILED: 06-06-01
PAT NO.: _____

- ☐ New Application with Transmittal Letter
☐ Utility ☐ Design ☐ CIP ☐ PCT ☐ Provisional
☐ Filing Under 37 CFR 1.53(b) ☐ CONT ☐ DIV
☐ Filing Under 37 CFR 1.114(RCE)
☐ Specification Consisting of: _____ pages
☐ Combined Declaration & Power of Attorney
☐ Assignment / Cover Letter
☐ Letter to Official Draftsman
☐ Drawings _____ Sheets ☐ Formal ☐ Informal ☐ Red-Ink
☐ Completion of Filing Requirements, PCT/DO/EO/905
or Formalities Letter and Executed Declaration
☐ Priority Document(s) / Cover Letter, No. Doc. _____
☒ Amendment: _____
☒ Transmtl Ltr ☒ Large Entity ☐ Small Entity
☐ Response
☐ Information Discl Stmt. PTO-1449(s) _____ doc(s)
☐ PTO / ISA / 210
☐ Notice of Appeal ☐ Appeal Brief
☐ Issue Fee Transmittal ☐ Sequence Listing
☐ FEES: _____
☐ Letter: _____
☒ Other: Cert Copy of JP 1998-323496

Receipt is hereby acknowledged of the papers filed as
indicated in connection with the above identified case.
COMMISSIONER OF PATENTS AND TRADEMARKS
Due Date: 02-04-04
Handcarry: _____

DOCKET NO. 0020-4863P



日本国特許庁
JAPAN PATENT OFFICE

別紙添付の書類に記載されている事項は下記の出願書類に記載されている事項と同一であることを証明する。

This is to certify that the annexed is a true copy of the following application as filed with this Office.

出願年月日 1998年11月13日
Date of Application:

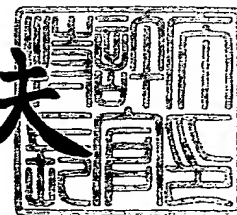
出願番号 平成10年特許願第323496号
Application Number:
[ST. 10/C]: [JP 1998-323496]

願人 ダイキン工業株式会社
Applicant(s):

2004年 1月28日

特許庁長官
Commissioner,
Japan Patent Office

今井康夫



出証番号 出証特2004-300368

Papers Filed herewith on: 02-04-04
DOCKET NO. 0020-4863P ATTY: ASH/ETP ⁵³
APPLICANT(S): NAKADA et al.
APPLN. NO. 09/831,598 FILED: 06-06-01
PAT NO.: _____

- ☐ New Application with Transmittal Letter
☐ Utility ☐ Design ☐ CIP ☐ PCT ☐ Provisional
☐ Filing Under 37 CFR 1.53(b) ☐ CONT ☐ DIV
☐ Filing Under 37 CFR 1.114(RCE)
☐ Specification Consisting of: _____ pages
☐ Combined Declaration & Power of Attorney
☐ Assignment / Cover Letter
☐ Letter to Official Draftsman
☐ Drawings _____ Sheets ☐ Formal ☐ Informal ☐ Red-Ink
☐ Completion of Filing Requirements, PCT/DO/EO/905
or Formalities Letter and Executed Declaration
☐ Priority Document(s) / Cover Letter, No. Doc. _____
☒ Amendment:
☒ Transmittal Ltr ☒ Large Entity ☐ Small Entity
☐ Response _____
☐ Information Discl Stmt. PTO-1449(s) _____ doc(s)
☐ PTO/ISA/210
☐ Notice of Appeal ☐ Appeal Brief
☐ Issue Fee Transmittal ☐ Sequence Listing
☐ FEES: _____
☐ Letter: _____
☒ Other: cert copy of JP 1998-323496

Receipt is hereby acknowledged of the papers filed as
indicated in connection with the above identified case.
COMMISSIONER OF PATENTS AND TRADEMARKS
Due Date: 02-04-04
Handcarry: _____

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